

The Impact of Trauma on Wellness:
Implications for Comprehensive
Systems Change
10×10

SAMHSA

MARCH 30, 2011

## Disclaimer

The views expressed in this training do not necessarily represent the views, policies, and positions of the Center for Mental Health Services (CMHS), the Substance Abuse and Mental Health Services Administration (SAMHSA), the U.S. Food and Drug Administration (FDA), or the U.S. Department of Health & Human Services (DHHS).





Ann Jennings, Ph.D.

Executive Director
The Anna Institute, Inc.



The Adverse
Childhood Experiences
(ACE) Study: The
Tragic Consequences
of Unaddressed
Childhood Trauma

Ann Jennings, Ph.D.

Executive Director

The Anna Institute, Inc.

## What Happened?



This is Anna at 18 months.



This is Anna years later—in a mental institution.



## Anna Caroline Jennings, 1960–1992





























# The Adverse Childhood Experiences (ACE) Study

- Collaboration between Centers for Disease Control and Prevention (CDC) and Kaiser Permanente HMO in California
- Largest study ever that determined both the prevalence of traumatic life experiences in the first 18 years of life and the impacts on later well-being, social function, health risks, disease burden, health care costs, and life expectancy
- 17,000 adult members of Kaiser Permanente HMO participated





# Adverse Childhood Experiences Reported by Adults: 2010 Five-State Study

- Collaboration between CDC and State Health Departments of AR, LA, NM, TN and WA.
- Focused solely on prevalence of ACEs in a population-based representative sample from multiple States stratified by demographic characteristics, including sex, age, education, and race/ethnicity
- 26,229 adults were surveyed





## ACE Study Findings (1998 and 2010)

- Adverse childhood experiences are common (verified by both CDC studies)
- Childhood experiences powerfully influence who we become as adults (verified by CDC/Kaiser study)



## The ACE Comprehensive Chart

#### Column 1

Adverse Childhood Experiences

The more types of adverse childhood experiences...

#### Column 2

Neurobiological Impacts and Health Risks

the greater the neurobiological impacts and health risks, and...

#### Column 3

Long-Term Health and Social Problems

the more serious the lifelong consequences to health and wellbeing.



# Types of Adverse Childhood Experiences (Birth to 18)

### Abuse of Child

- Emotional abuse, 11%
- Physical abuse, 28%
- Contact sexual abuse,22%

## Neglect of Child

- Emotional neglect, 19%
- Physical neglect, 15%

### Trauma in Child's Household

- Alcohol or drug use, 2%
- Depressed, emotionally disturbed, or suicidal household member, 17%
- Mother treated violently, 13%
- Imprisoned household member, 6%
- Loss of parent, 23%



# Impacts of Childhood Trauma and Adoption of Health Risks to Ease Pain

## Neurobiological Impacts

- Disrupted development
- Anger–rage
- Hallucinations
- Depression/other mental health challenges
- Panic reactions
- Anxiety
- Somatic problems
- Impaired memory
- Flashbacks
- Dissociation

## Health Risks

- Smoking
- Severe obesity
- Physical inactivity
- Suicide attempts
- Alcohol and/or drug abuse
- 50+ sex partners
- Repetition of trauma
- Self injury
- Eating disorders
- Violent, aggressive behavior



## Long-Term Consequences of Unaddressed Childhood Trauma

## Disease and Disability

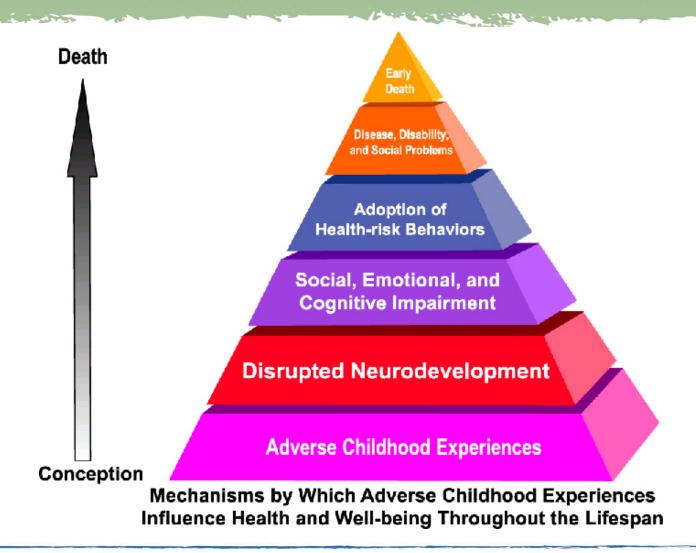
- Ischemic heart disease
- Autoimmune diseases
- Lung cancer
- Chronic obstructive pulmonary disease
- Asthma
- Liver disease
- Skeletal fractures
- Poor self-rated health
- Sexually transmitted infections

## Social Problems

- Homelessness
- Prostitution
- Delinquency, criminal behavior
- Inability to sustain employment
- Re-victimization
- Less ability to parent
- Teen and unwanted pregnancy
- Negative self- and other perception and loss of meaning
- Intergenerational abuse
- Involvement in MANY services
- HIV/AIDS



## Mechanisms by Which ACEs Influence Health and Well-Being Throughout the Lifespan



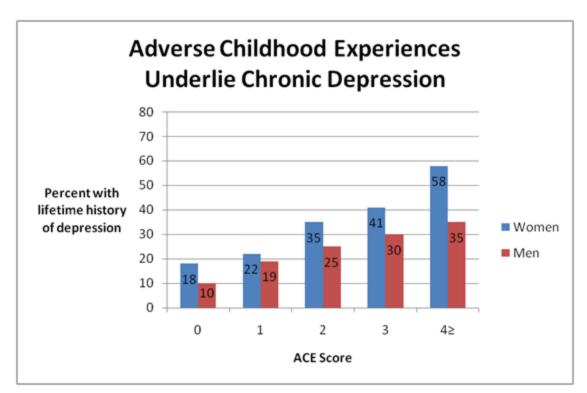


## **ACE Scores and Impact**

- Adverse childhood experiences are underlying factors for:
  - -Chronic depression
  - Suicide attempts
  - -Serious and persistent mental health challenges
  - Addictions
  - -Victimization of rape and domestic violence



# Adverse Childhood Experiences Underlie Chronic Depression

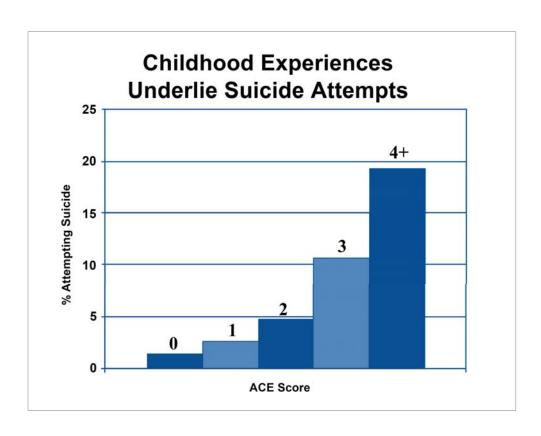


## Attributable to ACEs

- Women with an ACE score of 4 or more are more than 3 times as likely to have depression than women with an ACE score of 0.
- Men with an ACE score of 4 or more are 3.5 times as likely to have depression than men with an ACE score of 0.



## Adverse Childhood Experiences Underlie Suicide Attempts

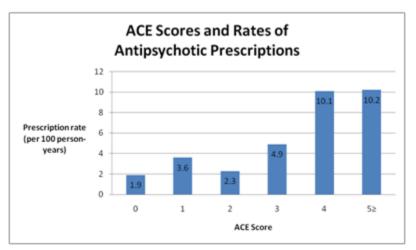


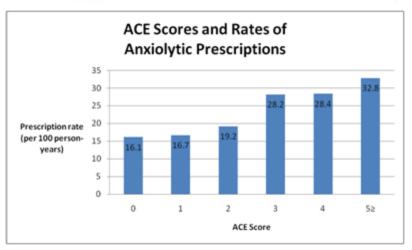
## Attributable to ACEs

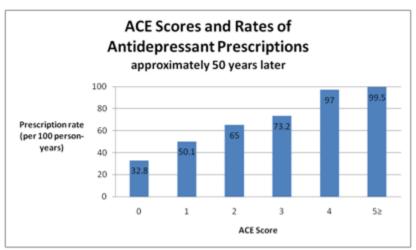
- 67% of all suicide attempts
- 64% of adult suicide attempts
- 80% of child/adolescent suicide attempts
- Children with an ACE score of 4 or more are almost 10 times as likely to attempt suicide than children with an ACE score of 0.



## Adverse Childhood Experiences Underlie Serious and Persistent Mental Health Problems

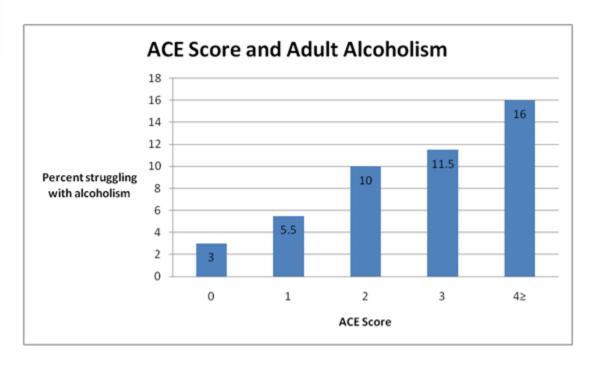








## Adverse Childhood Experiences Underlie Alcoholism

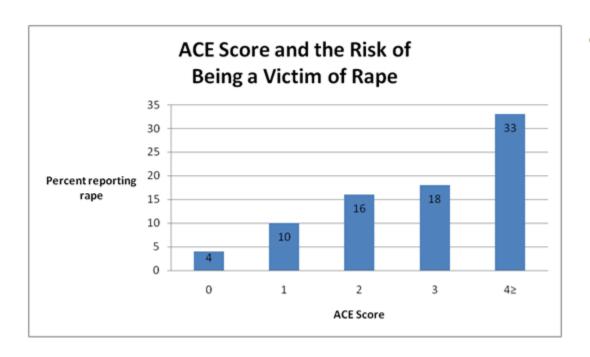


## Attributable to ACEs

People with an ACE score of 4 or more are over 5 times more likely to struggle with alcoholism than people with an ACE score of 0.



## Adverse Childhood Experiences Underlie Being a Victim of Rape



## Attributable to ACEs

People with an ACE score of 4 or more are over 8 times more likely to be a victim of rape than people with an ACE score of 0.



## Higher ACE Score Results in Significant Rises in Chronic Health Conditions

- Ischemic heart disease
- Autoimmune diseases
- Lung cancer
- Chronic obstructive pulmonary disease
- Liver disease
- Skeletal fractures
- Sexually transmitted infections
- HIV/AIDS





# **Higher ACE Score Results in Significantly Poorer Life Expectancy**

- On average, adults with a high ACE had double the death compared with adults who had not endured adverse childhood experiences.
- On average, children exposed to 6 or more ACEs died at age 60, whereas children without ACEs died at age 79.

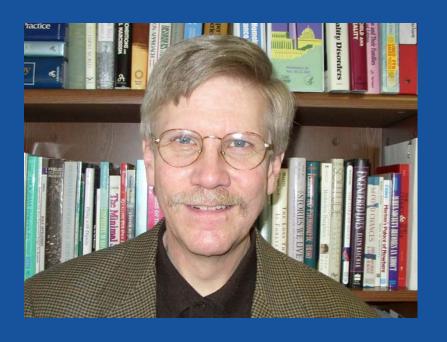




## Resources

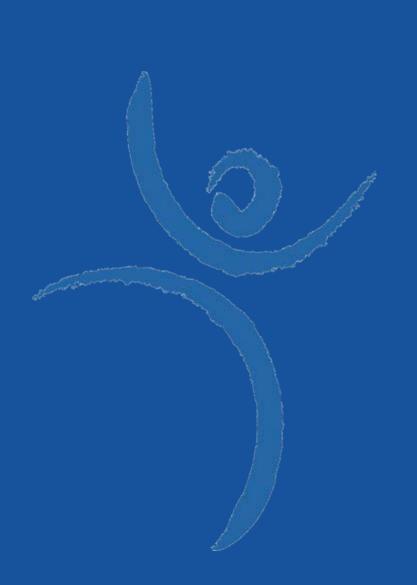
- Articles, curricula and reports: <a href="http://www.theannainstitute.org/articles.html">http://www.cdc.gov/ace/index.htm.</a>
- Jennings A., "The Damaging Consequences of Violence and Trauma: Facts, Discussion Points, and Recommendations for Behavioral Health Systems," NTAC/NASMHPD, 2004, <a href="http://www.theannainstitute.org/DCS.pdf">http://www.theannainstitute.org/DCS.pdf</a>.
- State Public Systems Coalition on Trauma: A Listserv for those in public service committed to addressing trauma. Email <u>SPSCOT@gwi.net</u> for information and to request membership.
- Trauma-Informed Care: Resources and Information. The Anna Institute, Inc. http://theannainstitute.org/TIC-RESOURCES.html.





## Roger D. Fallot, Ph.D.

Director of Research and Evaluation Community Connections, Washington, DC



# Creating Cultures of Trauma-Informed Care in Behavioral Health Settings

Roger D. Fallot, Ph.D.

Director of Research and Evaluation

Community Connections, Washington, DC

# Creating Cultures of Trauma-Informed Care: A Contextual Approach

- Trauma-informed care and trauma-specific services
- Trauma-informed cultures:
  - Incorporate knowledge about trauma—prevalence; impact, and multiple, diverse paths to recovery—in <u>all</u> aspects of service delivery and practice;
  - Are hospitable and engaging for survivors—and for all
  - Minimize revictimization—"do no harm;"
  - Facilitate healing, recovery, empowerment; and
  - Emphasize collaboration throughout the system.



## A Culture Shift: Core Values of Trauma-Informed Care for Consumers

- Safety: Ensuring physical and emotional safety
- Trustworthiness: Maximizing trustworthiness, making tasks clear, and maintaining appropriate boundaries
- Choice: Prioritizing consumer choice and control
- Collaboration: Maximizing collaboration and sharing of power with consumers
- Empowerment: Prioritizing consumer empowerment and skill-building



## Protocol for Developing a Trauma-Informed Culture

## Services-level changes

- Service procedures and settings
- Formal service policies
- Trauma screening, assessment, service planning, and trauma-specific services

## Systems-level/administrative changes

- Administrative support for program-wide traumainformed culture
- Trauma training and education
- Human resources practices



# Safety: Physical and Emotional

- To what extent do service delivery practices and settings ensure the physical and emotional safety of consumers?
- How can services and settings be modified to ensure this safety more effectively and consistently?



## Trustworthiness: Clarity, Consistency, and Boundaries

- To what extent do current service delivery practices:
  - Make the tasks involved in service delivery clear?
  - Ensure consistency in practice?
  - Maintain boundaries, especially interpersonal ones, appropriate for the program?
- How can services be modified to ensure that tasks and boundaries are established and maintained clearly, consistently, and appropriately?



# **Choice: Consumer Choice and Control**

- To what extent do current service delivery practices prioritize consumer experiences of choice and control?
- How can services be modified to ensure that consumer experiences of choice and control are maximized?



# Collaboration: Collaborating and Sharing Power

- To what extent do current service delivery practices maximize collaboration and the sharing of power between providers and consumers?
- How can services be modified to ensure that collaboration and power-sharing are maximized?



# **Empowerment: Recognizing Strengths and Building Skills**

- To what extent do current service delivery practices prioritize consumer empowerment, recognizing strengths and building skills?
- How can services be modified to ensure that experiences of empowerment and the development or enhancement of consumer skills are maximized?



# Changes in Practice: Revisiting the Core Values—for *Staff* this Time

- Safety: How can we ensure physical and emotional safety for <u>staff members</u> throughout our system of care?
- Trustworthiness: How can we maximize trustworthiness as <u>administrators and supervisors</u>? Make tasks and procedures clear? Be consistent?
- Choice: How can we enhance <u>staff members</u> choice and control in their day-to-day work?
- Collaboration: How can we maximize collaboration and sharing of power with <u>staff members</u>?
- Empowerment: How can we prioritize <u>staff</u> empowerment and skill-building at every opportunity? Provide resources?



## The Basic Lesson

- Staff members—all staff members—can create a setting of, and offer relationships characterized by, safety, trustworthiness, choice, collaboration, and empowerment only when they experience these same factors in the program as a whole.
- It is unrealistic to expect otherwise.



## Conclusion

- What we know about trauma, its impact, and the process of recovery calls for trauma-informed cultures of care.
- A trauma-informed approach involves fundamental shifts in thinking and practice at all programmatic levels.
- Trauma-informed organizational cultures offer the possibility of enhanced collaboration for all participants in the human service system.



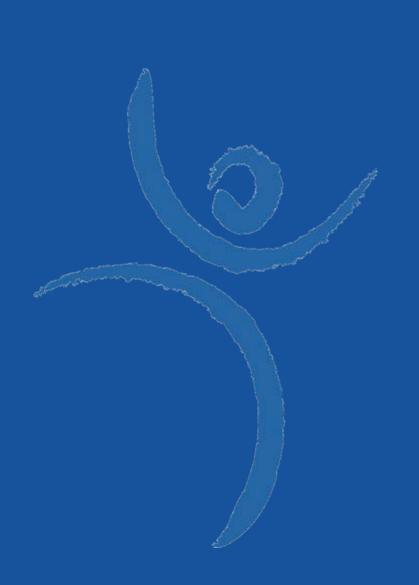
### Resources

- Harris, M. and Fallot, R.D. (Eds.) (2001). Using Trauma Theory to Design Service Systems. San Francisco: Jossey-Bass.
- "CCTIC Program Self-Assessment and Planning Protocol"
- "CCTIC Program Self-Assessment Scale"
- "CCTIC Program Services Implementation Form"
- Each of the materials is unpublished and available by contacting Community Connections.





Cathy Cave
Senior Program Associate
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# Engaging Community in Development of Trauma-Informed Supports

Cathy Cave
Senior Program Associate
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# Recognizing Trauma: Intersecting Interests

### National Center for Trauma-Informed Care

- Focus on Trauma-Informed Peer Support
- Engagement Guide for Trauma-Informed Peer Support with Women
- Center to Promote Trauma-Informed Practices and Alternatives to Seclusion and Restraint
- Federal Roundtable on Women and Trauma
- Family Violence Prevention and Services Program
- Office of Women's Health
- 10X10 Wellness Campaign



### Challenges to Healing

- Disparities exist in access to services and supports that facilitate healing from trauma.
- Those most impacted by trauma often have no idea that trauma is at the core of their distress.
- Providers often do not see being traumainformed as essential to their primary service delivery.
- Response to the prevalence of violence and trauma requires a broader reach.



### **Disparities: Contributing Factors**

### Inadequate Access to Care

Barriers to care can result from

- Economic:
- Geographic;
- Linguistic;
- Cultural; and
- Health care financing issues.
- Even when minorities have similar levels of access to care, health insurance and education, the quality and intensity of health care they receive are often poor.

### Substandard Quality of Care

- Patient-provider miscommunication
- Provider discrimination
- Stereotyping or prejudice
- Quality of care is usually rated on the four measures of effectiveness, patient safety, timeliness, and patient centeredness.
- <u>http://minorityhealth.hhs.gov</u>

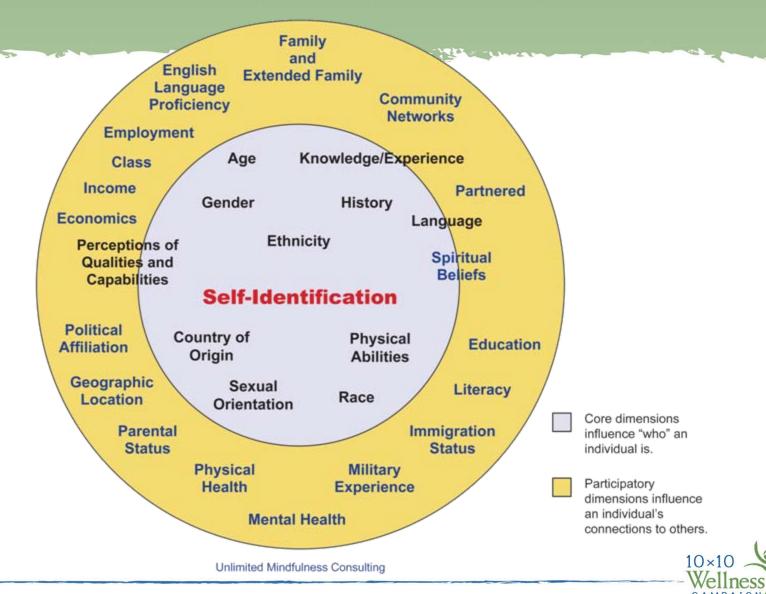


# Seeing People as Whole

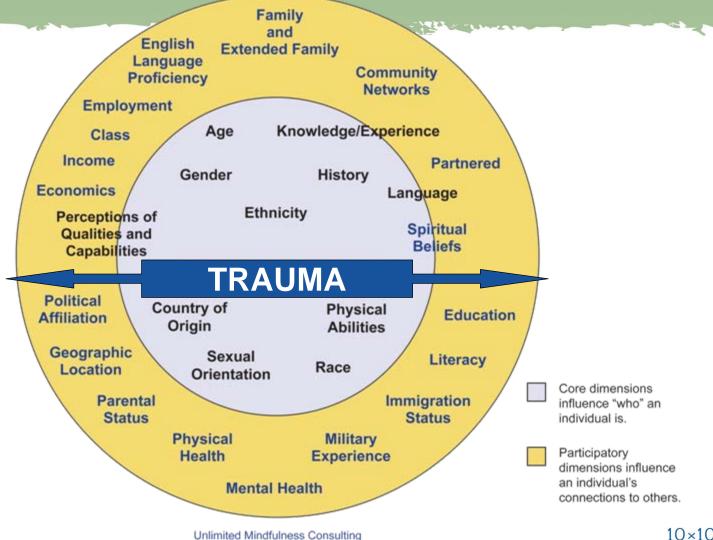
- When trauma is not considered, people see themselves and are looked upon by their behaviors alone, rather than with understanding of what they have experienced.
  - Need to increase understanding of the impact of trauma on people's lives, relationships, connections, and communities
- Opportunities for healing rest within the context of those relationships, connections, and communities.



### **Cultural Considerations**



### **Cultural Considerations**



# Trauma Impacts Wellness

- Social
- Physical
- Emotional
- Spiritual
- Occupational
- Intellectual
- Environmental
- Financial

- Unaddressed trauma impacts wellness.
- Wellness can be a unifying, universal focus for community engagement.
- Educating at the community level can increase understanding of trauma.



# The Power of Peer Support

- Countering shame and de-valuing by sharing survival and describing one's own lived experience
- Countering power imbalances and control with mutual growth, learning, and transparency
- Understanding the dynamics of differences and negotiating for shared power with intention
- Relationships are driven by choice.



"If you have come here to help me, then you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together." – *Lila Watson* 



# Community Involvement: Taking Peer Support to Scale

- The concepts employed to engage communities in trauma-informed services and supports include:
  - Self-determination;
  - Informed decision-making; and
  - Reciprocity.
- Meaningful collaborations are formed:
  - In anticipation of what is expected; and
  - In response to a particular individual need.
- There is intent to capitalize on every opportunity to build relationships that promote healing.



### Mindset for Wellness

 The stance is, "Who else can we reach and include?"

rather than,

 "We can't. It's too big. It's too broad. We can't get anything done."



# The Community

### Needs information about:

- trauma
- its impacts
- trauma-informed services and supports
- initiating dialogues about trauma
- where and how to look for local "experts"

### Wants information to be:

- easy to understand
- easy to share
- available in a variety of formats
- easy to adapt in communities



# Trauma-Informed Wellness Promotion: Effective Community Engagement

### Is there willingness to

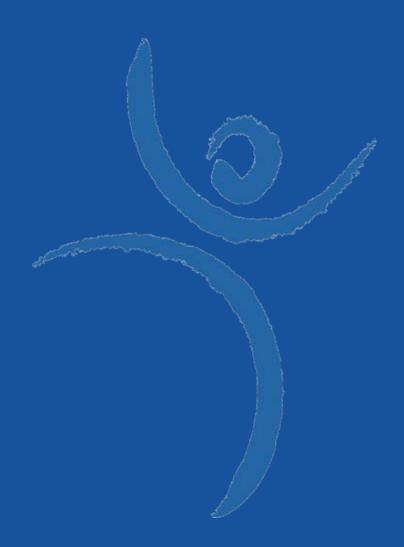
- Work within culturally diverse communities with:
  - Various health providers;
  - Neighborhood associations;
  - Businesses, and ethnic, social, and religious organizations; and
  - Spiritual leaders and healers?
- Support and promote communities in determining their own needs?
- Work with community members as full partners in decision-making and financial management?
- Achieve reciprocal transfer of knowledge and skills among all collaborators in the advancement of trauma-informed services and supports?



### Resources

- National Technical Assistance Center to Promote Trauma-Informed Practices and Alternatives to Seclusion and Restraint
  - For a technical assistance application, please call 855-236-7857 or e-mail
     Pam Rainer at <a href="mailto:prainer@ahpnet.com">prainer@ahpnet.com</a>
- Focus Group Analysis, National Leadership Council on African American Behavioral Health, August 2010
- Letters from the Front Line <a href="http://madinamerica.com/madinamerica.com/Foster/Archive.html">http://madinamerica.com/madinamerica.com/Foster/Archive.html</a>
- National Center for Cultural Competence <a href="http://nccc.georgetown.edu">http://nccc.georgetown.edu</a>
- National Center for Trauma-Informed Care <a href="http://www.samhsa.gov/nctic">http://www.samhsa.gov/nctic</a>
- Office of Minority Health <a href="http://minorityhealth.hhs.gov">http://minorityhealth.hhs.gov</a>





# Visions

### Vision

# What is your vision?



# Ann Jennings' Vision

- Our society holds as a sacred trust and duty
  - "that the rights of children are respected, that their welfare is protected, that their lives are free from fear and want, and that they grow up in peace." – Kofi A. Annan
- Child abuse and neglect become so rare that the Diagnostic and Statistical Manual of Mental Disorders (DSM) IV (or V) shrinks to the size of a pamphlet in two generations and the prisons empty.
  - Statement attributed to John Briere, C. Valentine (2002)
- Our government and economic infrastructures, institutions, communities, and services support traumainformed, nurturing, non-stressed parenting.



# Roger Fallot's Vision

- Behavioral health service settings where safety, trustworthiness, choice, collaboration, and empowerment are automatic and can be taken for granted.
- Other organizational settings (including schools, primary care, criminal justice, human services) come to embody the same values.
- Communities come to embody these values.



# Cathy Cave's Vision

- Communities are equitably engaged as partners to address health disparities and have agency and resources to facilitate healing.
- Implementation of trauma-informed services and supports is a commonplace prevention strategy.



# **Speaker Contact Information**

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## Speaker Biography—Ann Jennings, Ph.D.

Ann Jennings, Ph.D., has been involved for more than 27 years in raising public awareness and influencing fundamental change in how service systems view and treat people with histories of unaddressed childhood trauma. Personal experience underscores her conviction that prevention of and early intervention in childhood trauma is core to reducing human tragedy and creating compassionate and effective human services.

As Director of the Maine Office of Trauma Services for eight years, she initiated projects bringing trauma-informed trainings and services to numerous agencies throughout the state. She consults nationally, is the keynote speaker and presenter at national and state conferences, and has authored numerous publications.

Dr. Jennings is founder and Executive Director of The Anna Institute, a non-profit organization dedicated to speaking truth about childhood trauma, and providing trauma-informed resources for professional, community, and survivor use. For more information, visit: <a href="http://www.TheAnnaInstitute.org">http://www.TheAnnaInstitute.org</a>.

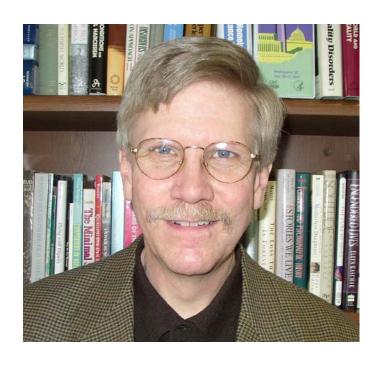




# Speaker Biography—Roger D. Fallot, Ph.D.

Roger D. Fallot, Ph.D., is a clinical psychologist and Director of Research and Evaluation at Community Connections, a private, not-for-profit agency providing a full range of human services in the District of Columbia. A graduate of Yale University, his professional areas of specialization include the development and evaluation of services for trauma survivors and the role of spirituality in recovery. The author of numerous clinical and research articles, he is a contributing author and co-editor (with Maxine Harris) of *Using Trauma Theory to Design Service Systems* (Jossey-Bass, 2001) and consults widely on the development of trauma-informed cultures of care in human services.

Dr. Fallot was Principal Investigator on the District of Columbia Trauma Collaboration Study, a project examining the effectiveness of integrated services for women trauma survivors. He and a group of clinicians at Community Connections have developed a men's version (M-TREM) of the Trauma Recovery and Empowerment Model, a group intervention for working with survivors of physical and sexual violence. Dr. Fallot is also interested in the relationships between spirituality, recovery, and well-being; he edited and contributed chapters to *Spirituality and Religion in Recovery from Mental Illness* (Jossey-Bass, 1998).





## Speaker Biography—Cathy Cave

Cathy Cave has twenty-eight years of program operations in education, child welfare, mental health, intellectual disabilities, and juvenile justice. She was former Director for Cultural Competence, New York State Office of Mental Health. She is a nationally engaged consultant, facilitator, and content expert striving for social change through experiential learning, mentoring, and leadership development. She focuses on trauma-informed services and supports, cultural and linguistic competence in service systems and in disaster response, facilitative leadership, and planful supervision.

She also works on organizational management and leadership, strength-based service approaches, participant-provider alliance building, peer support, countering racism and oppression, and building community collaboration. Her values and practices are informed by work experience, survival, and lived experience with service systems. She is deeply committed to improving services for individuals, families, and communities and bringing the principles of cultural competence and trauma informed care to the practice level.





# Questions and Answers

### You may now submit your question:

- By pressing \*1 on your telephone keypad.
- You will enter a queue and may ask your question in the order in which it is received.
- When you hear the conference operator, announce your first name.
- You may proceed with your question.



# The 10x10 Wellness Campaign

- The Federal Government has spearheaded the SAMHSA 10x10 Wellness Campaign, launched in 2010 to promote the importance of addressing all parts of a person's life in hopes of increasing life expectancy for persons with mental health problems by 10 years over the next 10 years.
- If you enjoyed this training teleconference, we encourage you to:
  - Join the <u>10x10 Wellness listserv</u> to learn more about promoting wellness and increasing life expectancy for persons with mental health challenges and substance use disorders. To join, visit <a href="http://www.10x10.samhsa.gov">http://www.10x10.samhsa.gov</a> and enter your e-mail address in the field on the left-hand navigation bar;
  - Sign the <u>Pledge for Wellness</u> to promote wellness for people with mental health problems by taking action to prevent and reduce early mortality by 10 years over the next 10 year time period; and
  - Visit the Campaign Web page at: <u>http://www.promoteacceptance.samhsa.gov/10by10/default.aspx.</u>



### Also of interest: The ADS Center

- The SAMHSA ADS Center enhances acceptance and social inclusion by ensuring that people with mental health problems can live full, productive lives within communities without fear of prejudice and discrimination. We provide information and assistance to develop successful efforts to counteract prejudice and discrimination and promote social inclusion.
- We encourage you to join the <u>ADS Center listserv</u> to receive further information on recovery and social inclusion activities and resources including information about future teleconferences.



### Archive

- This training teleconference is being recorded.
- Visit <a href="http://www.promoteacceptance.samhsa.gov/10by10/training.aspx">http://www.promoteacceptance.samhsa.gov/10by10/training.aspx</a> to download the:
  - PowerPoint presentation;
  - PDF version of the PowerPoint;
  - Audio recording; and
  - Written transcript.



# Survey

We value your suggestions. Within 24 hours of this teleconference, you will receive an email request to participate in a short, anonymous online survey about today's training. Survey results will help determine what resources and topic areas need to be addressed by future training events. The survey will take approximately 5 minutes to complete.

Survey participation requests will be sent to all registered event participants who provided email addresses at the time of their registration. Each request message will contain a Web link to our survey tool. Thank you for your feedback and cooperation.

Written comments may be sent to the Substance Abuse and Mental Health Services Administration's 10x10 Wellness Campaign at 10x10@samhsa.hhs.gov.



# Ann Jennings' Citations

### Slide 7—The Adverse Childhood Experiences (ACE) Study

- CDC ACE Study findings: <a href="http://www.cdc.gov/ace/index.htm">http://www.cdc.gov/ace/index.htm</a>.
- Felitti & Anda, "The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: Implications for healthcare," In R. Lanius and E. Vermetten, Eds., *The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease.* Cambridge University Press. 2010.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.

### Slide 8—Adverse Childhood Experiences Reported by Adults: 2010 Five-State Study

Center for Disease Control and Prevention, "Adverse Childhood Experiences Reported by Adults – Five States, 2009,"
 *Morbidity and Mortality Weekly Report 2010*, 2010, No. 59, pp. 1609-1613.
 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5949a1.htm

### Slide 9—ACE Study Findings (1998 and 2010)

- Felitti & Anda, "The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: Implications for healthcare," In R. Lanius and E. Vermetten, Eds., *The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease*. Cambridge University Press. 2010.
- Centers for Disease Control and Prevention, "Adverse Childhood Experiences Reported by Adults Five States, 2009,"
   *Morbidity and Mortality Weekly Report 2010*, 2010, No. 59, pp. 1609-1613.
   http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5949a1.htm

### Slide 10—The ACE Comprehensive Chart

 Jennings, A., "Adverse Childhood Experiences and Health and Well-Being Over the Lifespan," 2010 revision, http://www.theannainstitute.org/aces-chart.pdf.



### Slide 11—Types of Adverse Childhood Experiences (Birth to 18)

- Felitti & Anda, "The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: Implications for healthcare," In R. Lanius and E. Vermetten, Eds., *The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease.* Cambridge University Press. 2010.
- Dong, et al., "The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction," *Child Abuse and Neglect*, 2004, No. 28, Vol. 7, pp. 771–784.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.

### Slide 12—Impacts of Childhood Trauma and Adoption of Health Risks to Ease Pain

- Anda, et al., "The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology," *European Archives of Psychiatry and Clinical Neuroscience*, 2006, No. 256, pp. 174–186.
- Felitti & Anda, "The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: Implications for healthcare," In R. Lanius and E. Vermetten, Eds., The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease. Cambridge University Press. 2010.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.
- Williamson, Thompson, Anda, Dietz, & Felitti, "Body weight, obesity, and self-reported abuse in childhood," International Journal of Obesity, 2002, No. 26, pp. 1075–1082.



### Slide 13—Long-Term Consequences of Unaddressed Childhood Trauma

- Anda, et al., "Abused boys, battered mothers, and male involvement in teen pregnancy," *Pediatrics*, 2001, Vol. 107, No. 2, p. e19.
- Anda, et al., "Adverse childhood experiences and risk of paternity in teen pregnancy," *Obstetrics and Gynecology*, 2002, Vol. 100, No. 1, pp. 37–45.
- Anda, et al., "Childhood abuse, household dysfunction and indicators of impaired worker performance in adulthood," *The Permanente Journal*, 2004, Vol. 8, No. 1, pp. 30–38.
- Dietz, et al., "Unintended pregnancy among adult women exposed to abuse or household dysfunction during their childhood, *Journal of the American Medical Association*,1999, Vol. 282, pp. 1359–1364.
- Edwards, Anda, Felitti & Dube, "Adverse childhood experiences and health-related quality of life as an adult," In:
   Kendall-Tackett, ed. Health Consequences of Abuse in the Family: A Clinical Guide for Evidence-Based Practice.
   Washington, DC: American Psychological Association, 2003, pp. 81–94.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.
- Jennings A., "The Damaging Consequences of Violence and Trauma: Facts, Discussion Points, and Recommendations for Behavioral Health Systems," NTAC/NASMHPD, 2004, <a href="http://www.theannainstitute.org/DCS.pdf">http://www.theannainstitute.org/DCS.pdf</a>.
- Hillis, et al., "The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial outcomes, and fetal death," *Pediatrics*, 2004, Vol. 113, No. 2, pp. 320–327.
- Herman J. Trauma and Recovery: The aftermath of violence from domestic abuse to political terror, Basic Books, Dimensions of wellness, 1992.
- Swarbrick, M., "A wellness approach," *Psychiatric Rehabilitation Journal*, 2006, Vol. 29, No.4, pp. 311–314.



### Slide 16—Adverse Childhood Experiences Underlie Chronic Depression

- Anda, et al., "Alcohol-impaired parents and adverse childhood experiences: the risk of depression and alcoholism during adulthood," *Psychiatric Services*, 2002, Vol. 53, pp. 1001-1009.
- Anda, et al., "Adverse childhood experiences and prescribed psychotropic medications in adults," *America Journal of Preventive Medicine*, 2007, Vol. 32, No. 5, pp. 389–94.
- Chapman, et al., "Epidemiology of adverse childhood experiences and depressive disorders in a large health maintenance organization population," *Journal of Affective Disorders*, 2004, Vol. 82, pp. 217–225.
- Edwards, Holden, Anda & Felitti, "Experiencing multiple forms of childhood maltreatment and adult mental health: results from the Adverse Childhood Experiences (ACE) Study," *American Journal of Psychiatry*, 2003, Vol. 160, No. 8, pp. 1453–1460.
- Edwards, Dube, Felitti & Anda, "It's OK to ask about past abuse," *American Psychologist*, 2007, Vol. 62, No. 4, pp. 327–328.

### Slide 17—Adverse Childhood Experiences Underlie Suicide Attempts

Dube, et al., "Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span:
 Findings from the Adverse Childhood Experiences Study," *Journal of the American Medical Association*. 2001. Vol. 286, pp. 3089–3096.

### Slide 18—Adverse Childhood Experiences Underlie Serious and Persistent Mental Health Problems

- Anda, Brown, Felitti, Dube & Giles, "Adverse childhood experiences and prescription drug use in a cohort study of adult HMO patients," *BMC Public Health*, 2008, Vol. 4, No. 8, p. 198.
- Anda, et al., "The relationship of adverse childhood experiences to rates of prescribed psychotropic medications in adulthood, American Journal of Preventive Medicine, 2007, Vol. 32, pp. 389–94.
- Felitti & Anda, "The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders, and sexual behavior: Implications for healthcare," In R. Lanius and E. Vermetten, Eds., The Hidden Epidemic: The impact of Early Life Trauma on Health and Disease. Cambridge University Press. 2010.

### Slide 19—Adverse Childhood Experiences Underlie Alcoholism

- Anda, et al., "Alcohol-impaired parents and adverse childhood experiences: the risk of depression and alcoholism during adulthood," *Psychiatric Services*, 2002, Vol. 53, pp. 1001–1009.
- Dube, Anda, Felitti, Edwards & Croft, "Adverse childhood experiences and personal alcohol abuse as an adult," Addictive Behaviors, 2002, Vol. 27, No. 5, pp. 713–725.
- Dube, et al., "Adverse childhood experiences and the association with ever using alcohol and initiating alcohol use during adolescence," *Journal of Adolescent Health*, 2006, Vol. 38, pp. 444, e1–10.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.
- Felitti, V. J., "The origins of addiction: Evidence from the adverse childhood experiences study," English version of the article published in Germany as: Felitti VJ. Ursprünge des Suchtverhaltens Evidenzen aus einer Studie zu belastenden Kindheitserfahrungen, *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 2003, Vol. 52, pp. 547–559.

### Slide 20—Adverse Childhood Experiences Underlie Being a Victim of Rape

- Whitfield, Anda, Dube & Felitti, "Violent childhood experiences and the risk of intimate partner violence in adults: assessment in a large health maintenance organization," *Journal of Interpersonal Violence*, 2003, Vol. 18, No. 2, pp. 166–185.
- Anda, et al., "Abused boys, battered mothers, and male involvement in teen pregnancy," *Pediatrics*, 2001, Vol. 107, No. 2, p. e19.
- Felitti & Anda, "Adverse childhood experiences and their relationship to adult health and well-being: Turning gold into lead," PowerPoint Presentation, Human Nature & Early Experience, Notre Dame University, October 12, 2010.
- Dube, Anda, Felitti, Edwards & Williamson, "Exposure to abuse, neglect and household dysfunction among adults who witnessed intimate partner violence as children," *Violence and Victims*, 2002, Vol. 17, No. 1, pp. 3–17.
- Anda, et al., "Insights into intimate partner violence from the adverse childhood experiences (ACE) Study," In: P.R. Salber and E. Taliaferro, eds. The Physician's Guide to Intimate Partner Violence and Abuse, Volcano, CA: Volcano Press, 2006.

### Slide 21—Higher ACE Score Results in Significant Rises in Chronic Health Conditions

- Anda, et al., "Adverse childhood experiences and chronic obstructive pulmonary disease in adults," *American Journal of Preventive Medicine*, 2008, Vol. 34, No. 5, pp. 396–403.
- Brown, et al., "Adverse childhood experiences and the risk of lung cancer," BMC Public Health, 2010, Vol. 10, p. 20.
- Brown, Young, Anda, Felitti & Giles, "Asthma and the risk of lung cancer. Findings from the Adverse Childhood Experiences (ACE)," *Cancer Causes and Control*, 2005, Vol. 17, No. 3, pp. 349–350.
- Dong, Anda, Dube, Felitti & Giles, "Adverse Childhood Experiences and Self- reported Liver Disease: New Insights into a Causal Pathway," Archives of Internal Medicine, 2003, Vol. 163, pp. 1949

  –1956.
- Dong, et al., "Insights into causal pathways for ischemic heart disease: Adverse Childhood Experiences Study," *Circulation*, 2004, Vol. 110, pp. 1761-1766.
- Dube, et al., "Cumulative childhood stress and autoimmune disease," Psychom Med, 2009, Vol. 71, pp. 243–250.
- Felitti, et al., "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study," *American Journal of Preventive Medicine*, 1998, Vol. 14, Issue 4, pp. 245-258.
- Hillis, Anda, Felitti & Marchbanks, "Adverse childhood experiences and sexual risk behaviors in women: a retrospective cohort study," *Family Planning Perspectives*, Vol. 33, pp. 206–211.
- Hillis, Anda, Felitti, Nordenberg & Marchbanks, "Adverse childhood experiences and sexually transmitted diseases in men and women: a retrospective study," *Pediatrics*, 2000, Vol. 106, No. 1, p. E11.

### Slide 22—Higher ACE Score Results in Significantly Poorer Life Expectancy

- Parks, Svendsen, Singer, Foti & technical writer, Mauer, eds., "Morbidity and mortality in people with serious mental illness,"
   National Association of State Mental Health Program Directors: Medical Directors Council, 2006, http://www.NASMHPD.org.
- Cotton & Manderscheid, "Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death Among Public Mental Health Clients in Eight States," *Preventing Chronic Disease: Research Practice and Policy*, Centers for Disease Control and Prevention, 2006, Vol. 3, No.2, http://www.cdc.gov/pcd/issues/2006/apr/05 0180.htm.
- Brown, et al., "Adverse Childhood Experiences and the risk of premature mortality," *American Journal of Preventive Medicine*, 2009, Vol. 37, No. 5, pp. 389–396.
- National Association of State Mental Health Program Directors (NASMHPD) Medical Directors, "Mortality in people labeled with 'serious mental illness," PowerPoint – A selection of slides from NASMHPD July 2006 report, along with commentary and additional slides by Ron Unger, L.C.S.W.